

### **ABSTRACT OF THE DISCLOSURE**

Systems and methods are described for circular superdirective receive antenna arrays. A method includes calculating an minimum array efficiency of the superdirective circular receive array, calculating a maximum superdirective gain of the superdirective circular receive array, determining an amplitude weight or a phase weight for an array element in the superdirective circular receive array based on the minimum array efficiency and the maximum superdirective gain, and determining number of array elements in the superdirective circular receive array and a radius of the superdirective circular receive array.

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